**STATEMENT**

Code Grey is designed to communicate and coordinate an appropriate response to an emergency resulting in a key infrastructure failure within any of the SBGHC hospital sites. The main objectives of activating Code Grey are:

* To minimize service interruption and ensure continuation of critical services
* To activate a coordinated and timely response

Examples of infrastructure failure include:

* Main electrical failure
* Emergency power failure
* Water supply disruption
* Heating system failure
* Ventilation system shutdown
* Medical Gas Failure
* Telephone System Failure
* Information Technology Failure

**APPLICATION**

This policy and procedure applies to all SBGHC staff, physicians, volunteers, and contractors.

**PROCEDURE**

**Code Grey Categories**

Code Grey events can be divided into categories depending on which component of the facility is rendered inoperable regardless of the cause. The various Code Grey categories are listed in the table below.

|  |  |
| --- | --- |
| Category Name | Description |
| Main Electrical Failure | The main electrical power system is not functioning. This includes internal or external problems. |
| Emergency Power Failure | While the main electrical system is currently functioning, the emergency generator or its switching system is non-functional due to a problem, or has been taken off line for maintenance. Should any disruption of the main electrical system occur, there will be no emergency power supply. |
| Water Supply Disruption | The main water system is currently offline due to any cause in which clean potable water supply within the facility is affected. This section also refers to the issuance of a Boil Water Advisory |
| Heating System Failure | The building heating system is offline or not providing heating. This may be a result of an internal issue (e.g. malfunctioning boilers) or external factors (e.g. gas main break). |
| Ventilation System Shutdown | Ventilation system is unavailable or not performing effectively. This may be as a result of an external issue (e.g. hazardous spill) or internal issue (e.g. Vapours from a Code Brown). |
| Medical Gas Failure | One or more of the medical gases is currently offline. |
| Telephone System Failure | The hospitals telephone system has been rendered inoperable due to internal or external causes. |
| Information Technology Failure | The hospitals computer network is inoperable. This may be caused by internal or external causes. |

**Activating a Code Grey**

Any staff member with a specific responsibility for a particular system (e.g. medical gas) may announce a Code Grey.

Staff member suspecting a problem shall report the issue to their supervisor or manager for corrective action, or after hours, to the most responsible person on site (e.g. Team Leader).

Managers or Team Leaders should then contact the applicable department, and advise them of the situation. Following consultation with the responsible department, the Code Grey should be paged overhead as necessary.

The Code should be paged overhead stating the source of the Code Grey (e.g. Code Grey, Main Electrical Failure) three times.

Procedures

During a Code Grey, specific actions shall be taken dependent on the type of failure which has occurred, as they will each require different responses and resolutions.

Please see below for detailed outlines of the steps to be taken in the event of a Code Grey.

**MAIN ELECTRICAL FAILURE**

In the event that there is a main electrical system failure, the following steps shall be taken to address the issue:

**DURING NORMAL BUSINESS HOURS**

* The Facilities Manager or designate shall determine if the outage is caused by the electrical delivery system or is the loss of power internal to SBGHC.
* If external contact the utility company to determine a length of outage if possible. The Facilities Manager shall also notify all departments with an expected duration if this information is available.
* Assign Maintenance staff members to assist other departments in ensuring that equipment is plug into the emergency power plugs.
* The Facility Manager shall communicate that only essential equipment is in operation to conserve electrical consumption.
* Contact the SBGHC IT to send coordinate a broad message to SBGHC users to power down as many PC’s to conserve electrical consumption if applicable.
* Upon restoration of the normal electrical supply the facility Manager shall ensure that the Emergency power generator fuel is refilled.
* In the event of a Code Red ensure that the backup generator fuel supply is disabled.

**AFTER NORMAL BUSINESS HOURS**

* Contact the Team Leader and advise of the loss of electrical power. The Team Leader will advise the Maintenance Person on Call.
* The Emergency Power generators should turn on immediately. It is important to communicate this information to the Team Leader so that they can advise Maintenance Staff.
* Ensure required equipment is plugged into the emergency power plugs. Emergency Power receptacles are red, or the cover is labeled.
* Ensure only essential equipment is in operation to conserve electrical consumption.
* The Maintenance on Call person shall also notify the Facilities Manager if necessary.
* The Maintenance person will be assigned to check the generator periodically and shall also tour the facility to assist any dept. requiring assistance.
* The Facilities Manager or designate shall determine if the outage is caused by the external delivery system or if it is internal to SBGHC.
* If external the Facilities Manager or designate shall call the utilities company to determine an expected duration of outage if possible. The Facilities Manager or designate shall also notify all departments with an expected duration if this information is available.
* The Facility Manager or designate shall communicate that only essential equipment is in operation to conserve electrical consumption.
* Contact the SBGHC IT to send coordinate a broad message to SBGHC users to power down as many PC’s to conserve electrical consumption if applicable.
* Upon restoration of the normal electrical supply the Facility Manager or designate shall ensure that the backup generator fuel is refilled.
* In the event of a Code Red ensure that the backup generator fuel supply is disabled.

**WATER SUPPLY DISRUPTION**

The person receiving notice that a boil water advisory is in effect shall be responsible for notifying all departments and shall also request that the communications coordinator send out an organization wide message advising of the boil water advisory. Alternate water suppliers are included at the end of the boil water section.

**BOIL WATER ADVISORY**

**PATIENT CARE MANAGER(S)**

* Notify all nursing dept.’s under their direction that there is a boil water advisory is in effect.
* Ensure signage is place on washroom doors, water fountains, ice machines, staff areas and on the doors leading into the Nursing Units. See APPENDIX 1
* Contact Public Health to determine if an organism has been identified. Communicate information that has been received.

**EMERGENCY DEPARTMENT**

* Ensure signs are posted within the emergency dept. The boil water advisory signs are located at the end of this policy.
* When instructing patients regarding fluid intake, remind them not to drink tap water until boil water advisory has been lifted. SEE APPENDIX 1
* Ensure Public Health hand-outs are available for distribution providing instructions regarding the boil water advisory. See APPENDIX 2
* Begin Line Listing is patients begin showing symptoms.
* Confirm instructions to be released by telephone with On-Call Physician.

**ALL DEPARTMENTS**

* Ensure signage is place on washroom doors, water fountains, ice machines, staff areas and on the doors leading into your dept.
* Identify all equipment that requires the use of water.
* Contact the manufacturer regarding steps required to disinfect machine prior to return of service.
* Identify and notify Materials Management of items that require increased inventory (i.e waterless hand wash, lab reagents, toothbrushes)

**FACILITIES DEPARTMENT**

* Contact supplier and arrange for alternate water supply.
* Arrange available drinking water sources to patient care areas and food services.
* Turn off water supply to water fountains and ice machines and post signage.
* Ensure signs are posted on all washrooms located within the hospital.
* Post signs on all entrances to the hospital.
* Identify all machines utilizing tap water in internal workings which may require disinfection prior to return to use.
* Assist with water delivery to patient care areas and food services.
* Consider the need for a greater water supply source if advisory is long term.
* Consider the need for portable toilets and hand washing stations if the advisory is long term.

**FOOD SERVICES**

* Discard all food prepared with tap water that has not been boiled for at least 5 minutes.
* Discontinue the use of ice/ ice water.
* Ensure hot water is maintained at a rolling boil for a minimum of 5 minutes.
* Ensure wash water is not lower that 60° C (140° F) and not high than 71°C (160° F) and sanitizing rinse water not lower than 82° C (180° F)

**CSR**

* Revert to chemical disinfection for medical devices and follow the manufacturer’s recommendation regarding High Level Disinfecting.
* When the contaminant is identified, refer to manufacturer’s instructions for procedure to disinfect machines.

**MATERIALS MANAGEMENT**

* Discuss and arrange with Building Services for the delivery of alternate water supply.
* Discuss with manager’s items requiring increased inventory and arrange/ order delivery.

**IMPORTANT NOTES**

Boil water advisory notices are included within the policy (at the end of the policy in the Appendix Section), print off and post as many as required.

Public Health handout is also including in this policy following the Boil Water advisory notice. Print off as many as needed and distribute to the members of the public as required.

### CONTACT NUMBERS FOR ALTERNATE WATER SUPPLY

### Saugeen Filter Supply

102 Kincardine Road **Water Centre Business Hours:**

Walkerton, Ontario Monday – Friday 8:00 a.m. to 5:30 p.m.

N0G 2V0 Saturday 8:30 a.m. to 12:30 p.m.

1-800-567-4188 **After Hours:**

1-519-881-0747 Paul/Linda Oehm (519) 881-2853 Home

Fax 881-1093 (519) 889-0487 Cell

 Paul/Margaret Rossignol (519) 881-1906 Home

 (519) 889-0227 Cell

 Doug Busby (519) 881-0610

Culligan **Business Hours**:

1-519-364-3830 Monday – Friday 8:00 a.m. to 5:00 p.m.

1-800-461-1416 After Hours:

Daryl Mawhinney (519) 364-2478

Dennis Wettlaufer (519) 364-5243

Emergency Pager No. (519) 372-4574

Products Available:

* 18 l reverse osmosis water
* cold and room temp water coolers
* hot and cold temp water coolers
* manual pumps
* 500 ml, 1.5 l& 4 l water (case lots only)

**Crystal Vending**  **Business Hours:**

1-519-396-4555 Monday – Friday 9:00 a.m. to 5:00 p.m.

Fax -396-5837 After Hours:

 Rod & Scott MacSween (519) 396-9806 Home

Products Available: (519) 525-2009 Cell

500 ml spring water

24/7 basis

Minimum delivery: 72 cases (1 pallet)

**HVAC SYSTEM FAILURE**

**DURING NORMAL BUSINESS HOURS**

* If noticed by a staff member that there is no HVAC being provided by the ventilation system shall notify their manager immediately
* The Manager will then notify the Facilities Manager.
* The Facilities Manager along with the required maintenance staff shall begin investigating the source of the issue and begin to rectify the issue.
* Nursing staff shall obtain blankets and begin providing them to patients who require additional blankets.
* The Facility Manager should consider the need to obtain space heaters or fans if there is potential the issue could be long term.
* Upon resolution of the issue the Facilities Manager shall notify all departments that the heating system is back on line.

**AFTER NORMAL BUSINESS HOURS**

* The first staff member to notice that the HVAC system is not operating shall notify the Team Leader on duty.
* The Team Leader will call in the Maintenance Staff to begin addressing the issue.
* Upon receiving the call from the Team Leader that there is a loss of heat the Maintenance staff shall notify the Facilities Manager or designate. The Facilities Manager or designate should attend the site to assist in investigating the reason the system is off.
* Nursing staff shall begin to gather as many blankets as possible and distribute them to patients as required.
* The Facilities Manager or designate should consider the need for space heaters or fans if there is potential the issue could be long term.
* Upon resolution of the issue the Facilities Manager or designate shall notify all departments that the HVAC system is back on line.

**MEDICAL GAS FAILURE**

**DURING NORMAL BUSINESS HOURS**

* The first person to notice that the medical gas system is falling or not producing the required amounts shall shut the system off immediately. As the loss of function may be due to a leak in the system and potentially causing an explosive atmosphere.
* The first person to notice that the medical gas system is failing or not producing the required amounts shall notify the Patient Care Manager(s).
* The DPC shall notify Maintenance immediately to begin addressing the issue.
* The Maintenance Staff person shall also notify the Facilities Manager immediately.
* If the medical gas failure is due to a leak within the system the need to evacuate the area shall be considered.
* Upon resolution of the issue the Facilities Manager shall notify all departments that the medical gas system is functioning correctly and staff may begin to use the system.

**AFTER NORMAL BUSINESS HOURS**

* The first person to notice that the medical gas system is falling or not producing the required amounts shall shut the system off immediately. As the loss of function may be due to a leak in the system and potentially causing an explosive atmosphere.
* The first person to notice that the medical gas system is failing or not producing the required amounts shall notify the Team Leader. The Team Leader will be responsible for notifying the Manager on Call if deemed necessary.
* The Team Leader shall notify Maintenance on call immediately to begin addressing the issue.
* The Maintenance Staff person shall also notify the Facilities Manager immediately if necessary.
* If the medical gas failure is due to a leak within the system the need to evacuate the area shall be considered.
* Upon resolution of the issue the Facilities Manager or designate shall notify all departments that the medical gas system is functioning correctly and staff may begin to use the system.

**VENTILATION SYSTEM**

There are various reasons that the ventilation system would need to be disabled, such as a large chemical spill within the community of the malfunction of the ventilation system itself.

Upon declaration of a Code Grey the following actions shall occur.

**DURING NORMAL BUSINESS HOURS**

* Close all windows.
* Turn off all air handling units. Heat in winter and air conditioning in summer would have to be produced alternately, depending on period of shut-down.
* Cover air intakes with plastic and duct tape.
* Turn off all exhaust fans. Affected services, i.e. kitchen and OR, would have to be modified as required.
* Seal up all external doors with plastic and duct tape.
* The need to restrict visiting hours should also be considered.

**AFTER NORMAL BUSINESS HOURS**

**Upon declaration of a Code Grey the following actions shall occur.**

* The Team Leader shall notify the Maintenance person on Call
* The Maintenance person on Call shall notify the Facilities Manager if deemed necessary by the Facility Manager the Occupational Health and safety Coordinator should be contacted. .

**The Team Leader shall begin taking the immediate actions listed below:**

* Close all windows.
* Attempt to make the building as air tight as possible until the Maintenance staff arrives.

**Upon arrival the Maintenance on Call shall begin to take the following actions:**

* Turn off all air handling units. Heat in winter and air conditioning in summer would have to be produced alternately, depending on period of shut-down.
* Cover air intakes with plastic and duct tape.
* Turn off all exhaust fans. Affected services, i.e. kitchen and OR, would have to be modified as required.
* Seal up all external doors with plastic and duct tape.

**PROCEDURE FOR ENTRY/EXIT**

* One entrance with double-door (to keep air pressurized) must be used for all entries into and exits from the building.
* All other entrances/exits must be locked.

**TELEPHONE SYSTEM FAILURE**

**Report all URGENT Telephone Related Issues**

Submit an SBGHC IT Help Desk ticket and;

During Regular Working Hours (7:00 a.m. – 4:30 p.m.); contact the SBGHC IT Department.

519-881-1220 ext. 2413

519-881-1220 ext. 2427

519-881-1220 ext. 4333

After hours, weekends, statutory holidays: contact Registration in Walkerton

519-370-2400 – dial 0

Registration staff will contact appropriate IT department staff.

**TOTAL TELEPHONE FAILURE FOLLOW THE STEPS LISTED BELOW**

* Insert the analog telephone into your fax machine line. Once you hear the dial tone you may begin placing calls and/or use available cellular phones.
* If possible, determine the nature of the telephone outage
* Internal Issue (e.g. system failure)
* External Issue (e.g. issue with telephone provider)
* If possible, determine expected duration of outage.
* Determine which areas are affected by the outage.
* Establish a point of command. After hours this shall be the most senior staff person working at the time of the incident they will retain command until relieved by a more senior staff person. All actions taken shall be documented.
* Collect all hospital cell phones that are available within the hospital. Attempt to make calls using the hospital cell phones. Continue to use hospital cell phones until consistent communications is established.
* Advise departments of the telephone system outage via system wide page if paging is available. This notice should also advise what modes of communications are available and working.
* Notify other Emergency Services to advise of the telephone outage (as applicable)
* Notify On-Call Physician
* South Bruce OPP (888) 310-1122 (after hours dispatch)
* West Grey Police (519) 369-3046
* Bruce County EMS (519) 881-1291
* Grey County EMS (519) 371-4155
* Arran-Elderslie Fire (519) 363-3730
* Brockton Fire (519) 881-0642
* Kincardine Fire (519) 396-2141
* West Grey Fire (519) 369-2200

**ONLY THE AREAS AFFECTED SHALL BE CONTACTED**

* Consider the need to notify the Senior Team.
* Consider the need to active the Incident Command Centre.
* Ensure regular reports are received from Maintenance.
* Ensure regular reports are received from all other departments.

**INFORMATION TECHNOLOGY SYSTEM FAILURE**

**DURING NORMAL BUSINESS HOURS**

* Advise the SBGHC Information Technology (IT) staff immediately of the failure of the computer system.
* SBGHC IT staff will communicate with Registration staff to make a system wide page indicating the scope of the issue.
* IT staff will then begin to work on diagnosing and correcting the issue.
* SBGHC IT staff will communicate with Registration staff to make a system wide page indicating an all clear so that users may begin using the system(s) again.
* Depending on the scope of the issue, clinical staff may need to move to paper based patient charting. Upon restoration of the system, the clinical notes shall be back entered in to the electronic system.
* The Team Leader shall also complete an Incident report in the RL6 system.

**AFTER NORMAL BUSINESS HOURS**

* The Team Leader will contact the Manager on call for direction.
* Manager on call will contact SBGHC IT staff and provide details of the issue.
* IT staff will then begin to work on diagnosing and correcting the issue.
* Depending on the scope of the issue, clinical staff may need to move to paper based patient charting. Upon restoration of the system, the clinical notes shall be back entered in to the electronic system.
* The Team Leader shall also complete an Incident report in the RL6 system.

**DEFINITIONS**

None applicable to this policy.

**REFERENCES**

None applicable to this policy.

**VERSION HISTORY**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Review Date** | **Changes Made By** | **Brief Summary of Revisions Made** |
| 1.0 |  |  |  |

**APPENDIX**

APPENDIX 1

OUT OF ORDER

BOIL WATER ADVISORY

IN EFFECT

1. **Do not drink tap water**
2. **Do not brush teeth with tap water**
3. **Assess/Check whether water is suitable for handwashing and general use prior to using.**